



PART ONE

PART 1

1. PURPOSE OF THIS STUDY

The purpose of this study is to provide the Town of Brookline with a basis for sound decision-making about the potential, desirability and feasibility of building a ninth elementary (grades K-8) school. The study identifies publicly and privately owned sites that could reasonably accommodate a new and/or an expanded elementary school to accommodate 550 students in 100,000 square feet (SF) of building space. The school program also includes adjacent staff and visitor parking along with playgrounds and recreational space.

The review of possible town sites was governed by school site criteria set forth by the Town (Appendix 1). The finalist sites presented in this study each demonstrate hypothetical physical feasibility with a concept site plan and development cost estimates to allow “order of magnitude” comparison between sites. This study does not make a recommendation as to whether to build a ninth school, nor does it recommend the best finalist site for a school, but gives the Board of Selectmen (BOS) and Brookline School Committee (BSC) the information needed to be able to compare and contrast alternatives and to make an educated decision regarding a 9th school in Brookline.¹

It should be noted that the scope of this study did not include addressing other challenges faced by the Public Schools of Brookline (PSB) beyond the issue of K-8 enrollment growth. Some of these other issues, not addressed here, include:

- Addressing Brookline High School space needs
- Accommodating BEEP space needs (most of which is now renting private property)
- Correcting existing sub-optimal spaces in the schools²

2. GETTING TO THIS POINT

This Ninth Elementary School Site Study grew out of the need to respond to changing demographics in the town that are resulting in a growing school population. These changes are occurring as we recognize the physical limitations of the existing elementary school infrastructure in Brookline. Beginning with the slow escalation in school enrollments in 2007 and continuing through the more rapid growth of the past few years, the PSB has answered these changes by adopting a cost-efficient and flexible “expand-in-place” approach. However, enrollments continue to escalate and the existing approach to accommodating growth is no longer adequate. This study is a response to these circumstances.

B-SPACE

In 2013 the Selectmen created a new town-wide committee of residents: the Brookline School Population and Capital Exploration Committee (B-SPACE). The Selectmen charged B-SPACE with gathering and analyzing data, and guiding a community discussion on programming and space planning that would accommodate rapid and accelerating enrollment growth and support the educational goals of the PSB.

B-SPACE considered almost 40 options which sought to either: 1) draw students away from the existing K-8s (by building a new school, for example); 2) expand the existing K-8 schools to meet the projected demand; and/or 3) lower enrollments by eliminating programs for non-Brookline residents (METCO and the Materials Fee program for children of Brookline employees). While privately owned sites were considered for a possible ninth elementary school, taking the sites using eminent domain authority was not seriously considered.

Subsequent to the completion of the BSpace study, three factors changed. First, and most important, the actual enrollments continued to accelerate, exceeding the B-SPACE assumptions. Second, the Massachusetts School Building Authority (MSBA) elected not to partner with the Town on one of the two major projects envisioned in its recommendations. Finally, the Override Study Committee recommended the Town and the PSB reopen consideration of a ninth elementary school as an alternative to the expand-in-place model. Thus CivicMoxie was engaged to analyze elementary school site options that also include privately-owned property.

The full B-SPACE report and recommendations are available at www.brooklinema.gov/DocumentCenter/View/2604

The Schools, Students + Trends

Town demographics are changing, with profound effects on Brookline’s schools. The graphics here represent the trends in Brookline and effects on sections in the schools since 2005. The term “section”

¹ Adapted from Town of Brookline Invitation to Bid/Request for Proposals, 10/30/14.

² Sub-optimal spaces include resource classrooms carved out of hallways, music rooms partitioned from auditoriums, etc.

is used throughout this report in lieu of classroom or homeroom. A section represents a homeroom classroom.

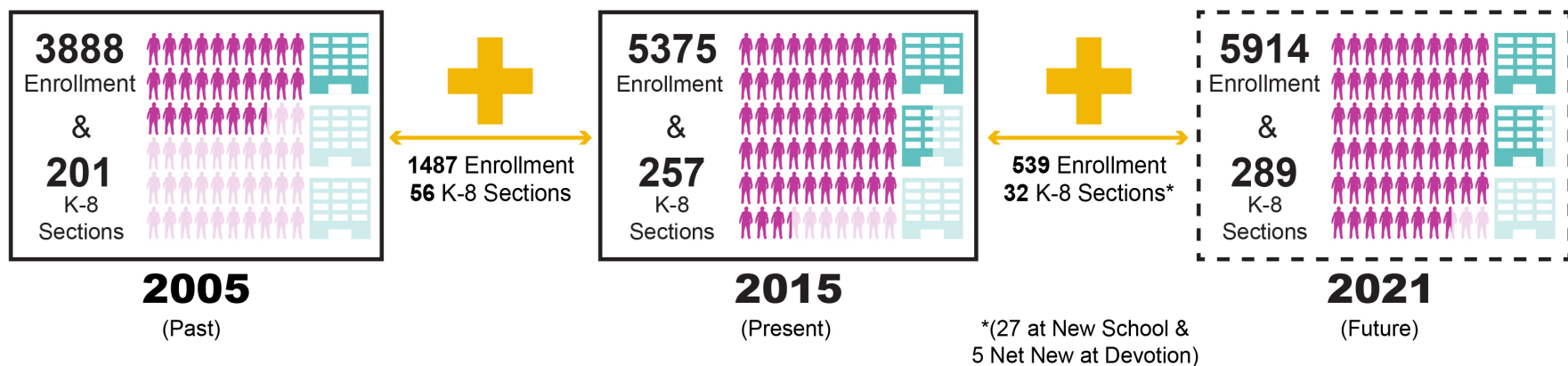
From Fiscal Year 2005 to Fiscal Year 2015, the number of K-8 sections grew from 201 to 257 (Appendix 9). For the last ten years, the PSB has used a variety of tools to accommodate the growing enrollment in the Town's over-capacity schools. For example, the PSB has added classrooms at Runkle, Heath, Lawrence, and Baker, divided classroom spaces and carved out classes from hallways and auditoriums, increased the number of students in most classrooms from 18-21 students to 20-22 students, moved all building custodial space to Larz Anderson Park temporarily, moved most BEEP classrooms to private rental space,

and compressed administrative space (or moved administrative space to private rental space areas). During this time of rapid enrollment growth, common spaces (e.g., cafeteria, auditorium, gymnasium, library, administrative, play space, specialty classrooms) have usually not expanded in proportion to classroom additions. In the same time period, the overall K-8 enrollment grew from 3,888 to 5,375.

Based on consistent increasing enrollment in the lower grades (Appendix 9), the PSB estimates that by FY 2021, another 539 children or 32 K-8 sections will be needed. This projected growth averages approximately four to five sections every year in the six years of FY 2016 through FY 2021. FY 2021 overall enrollment is estimated to be 5,914 students.

No one can predict the future with certainty and in fact, it is very difficult to estimate exact enrollment for any specific future school year. The PSB has had multiple consultants work with them on enrollment projections, including the MGT study and the MIT team during the Override Committee work. As shown in this work, using live births is no longer an accurate predictor of future school enrollments; the number of children moving into town has also affected enrollment and there are no accurate indicators to predict how many will arrive and when. However, the lack of hard numbers for each year moving forward does not negate the need to plan and to act. Cities, towns, and businesses face these decisions every day and the PSB has been estimating and accommodating enrollment for decades. The future enrollments used for this study are estimated by the PSB.

Brookline Schools Growth K-8



Including the planned expansion at Devotion School and the recently completed expansion at Lawrence, the school building capacity for all eight elementary schools for grades K -8 will be approximately 5,440 students by FY 2018 (Appendix 9). To accommodate some of the overcrowding between now and when Devotion is completed, additional K-8 space has been identified with two modular units at Baker School and three K-8 sections of rental space adjacent to the Pierce School beginning in Fall 2015.

The “No Ninth School Decision”

No additional section space can be carved out within the existing school building footprints. If the decision to build a ninth elementary school is not reached by FY 2016, physical building additions and/or administrative school strategies and policies (e.g., classroom assignments, further increases in class size) must be considered. To execute an updated expand-in-place strategy, any non-building strategies would need to begin planning now so that they are in place in time. These types of strategies would require a public process and potential series of votes by the BSC. Meanwhile, the PSB and Town Building staff would need to further study an updated expand-in-place building strategy. The strategies of maximizing space, re-allocating underutilized space, reducing staff space, and relocating some operations and staff off site have been exhausted. The remaining solutions for answering the need for additional school space are limited to modulars, additional private space rentals near existing schools, and small, piecemeal additions to existing schools, where possible.

Undertaking small additions to the existing schools represents the expand-in-place option which can alleviate part of the problem of enrollment growth. However, because enrollments have continued to rise beyond the B-SPACE projections and the MSBA declined to financially contribute to one of the major expansion projects, this strategy cannot address all the needs of the schools without high costs in terms of dollars and staff resources and planning for increased classroom size. From the presentation of B-SPACES’s findings in July 2013, to the current baseline of March 2015, the K-8 school enrollment grew by 6.1%. At the time of the B-SPACE report, kindergarten class size was projected to be 630 children for the next couple years. However, there were 692 children enrolled in Kindergarten in March 2015. The projected future enrollment has also increased by 4.3%.³

This study made a preliminary assessment of property adjacent to the existing eight elementary schools and Brookline High School (Appendix 7) and found limited options for expansion. In addition, there are a number of factors that make expanding in place undesirable and more expensive as a long-term strategy:

1. Some schools have limited or no available adjacent land
2. Other schools are adjacent to small residential parcels that would require multiple acquisitions at very high land values and smaller-than-desired additions

³ B-SPACE estimated a maximum of 5,670 students (using 630 kindergarten enrollment), and the PSB now estimates 5,914 students by FY2021, using 650 children for kindergarten enrollment (Appendix 9).

3. In some cases, there is a poor match between the building plan and available land...offering expansion space in awkward or impossible locations in a school
4. Most solutions require more than the addition of classrooms; they also include significant, costly, and sometimes impractical expansions of common and specialty spaces, as detailed earlier
5. Small additions of only classroom spaces are not eligible for MSBA funding
6. Finally, the cost of staff time and financial resources to undertake multiple small projects would be high

For purposes of considering a “No Ninth School Decision,” School and Building staff believe an updated expand-in-place strategy would likely cost more than \$2 Million per classroom. Additionally, the Town would need to hire an architect to update the expand-in-place potential for each school. Finally, School and Building staff believe a full solution would require consideration of permanent, non-building policy strategies (e.g., increased classroom size) to fully accommodate the projected growth. Any non-building strategies would require the PSB staff planning beginning in FY2016 so that these strategies are in place by FY2021. These types of strategies would first require a public process and potential series of votes by the BSC in FY 2016.

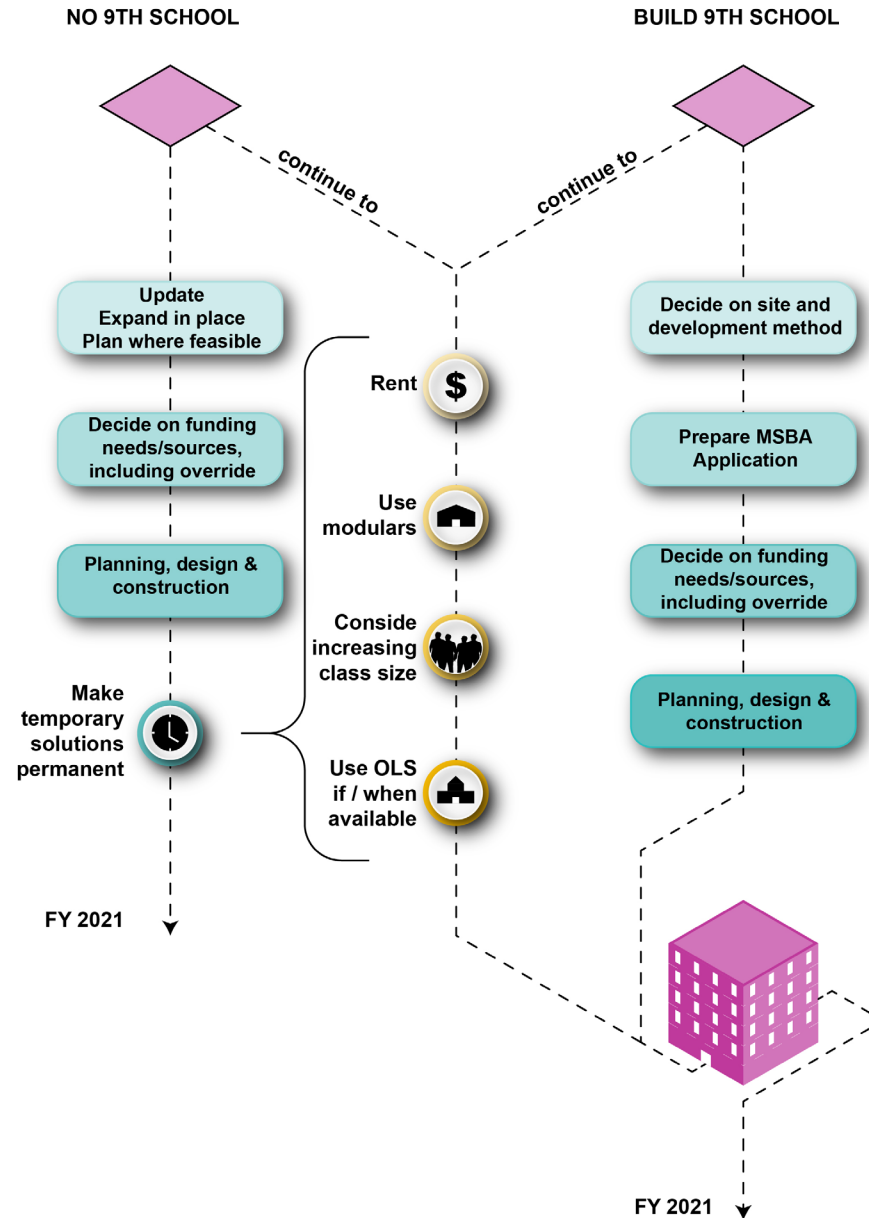
Risk of Overbuilding Municipal Facilities

The CivicMoxie team and the Town of Brookline also considered the question of whether constructing a ninth elementary school would be overbuilding if enrollment dips in the future. Because of the stop-gap measures undertaken in the past decade,

some spaces and accommodations in the schools are sub-optimal. A reduction in enrollment would provide an opportunity to:

- incorporate administrative space back into the schools. These functions have been relocated to Webster Street where the PSB currently rents privately-owned space;
- Bring back BEEP classrooms in to the schools;
- Correct sub-optimal spaces;
- Bring back supportive building services (these services are in need of 10,000 SF).

INCREASING ENROLLMENT: TWO CHOICES



3. THE SITE STUDY

Methodology

The CivicMoxie team sought to provide a holistic assessment of suitable elementary school site possibilities by organizing the work of this study in the following tasks:

- Review the school program and site selection criteria provided by the Town, and refine program and criteria in consultation with the Town. Review initial target areas map identifying possible best areas for a school based on redistricting criteria.
- Research case studies for traditional and concept schools in a variety of settings.
- Conduct a broad search of property and review data on sites using Google Earth, Town GIS maps and assessor data, driving/walking tours of the Town, and property information gathering from previous Town investigations and studies and from Town staff, real estate brokers and online listings.
- Prepare a Town-wide map of possible sites and apply criteria covering a range of factors regarding site suitability including:
 - Site location
 - Site access
 - Site size and availability
 (See sidebar on the facing page for a list of all the criteria).
- Identify sites suitable for expand-in-place of existing schools, concept/theme-based schools.
- Where possible, gather information that may be useful in future high school expansion and other municipal facility need discussions.
- Identify properties contiguous to Town-owned sites including the existing elementary schools to determine if expanded sites could accommodate either a new ninth school or an enlarged existing school.
- Create a matrix of sites and selection criteria including ownership, site assessments and parcel sizes, keyed to Town map.
- Investigate additional site characteristics that affect suitability including historic and open space restrictions.
- Develop schematic site layouts to test suitability for a school at six sites that best meet the site selection criteria. Explore variations on site layouts to identify best option, if any. Also determine possible development scenarios for each site – whether public, private or partnerships.
- Prepare conceptual-level development cost estimates using assessor information, current school construction cost information provided by the Town from current school project costs and from the team's knowledge of current similar projects and current industry standards.
- Review Town-generated school redistricting scenarios for each of the six sites and prepare an analysis of impediments and opportunities for each site.
- Finalize site layouts, criteria matrix and cost estimates.

Throughout this process, the CivicMoxie team has worked closely with the Town. The Town has provided expertise, knowledge of Brookline, and access to municipal records

from a variety of departments including PSB, Planning & Community Development, Parks Division, Building Department, GIS Division, the Assessor's office, and Town Counsel.

Neighborhood School Analysis Factors

Any changes to Brookline Schools capacity and location are likely to have an impact on school district boundaries (Appendix 5), whether these changes are simply growth of school enrollment, expansion in place of existing schools, or the construction of a ninth elementary school. This study was guided by the general desire to preserve the Town goal of providing walkable neighborhood K-8 schools, where possible.

The following guidelines and/or conditions are incorporated into the GIS student assignment redistricting models for analyzing the ability of a particular site to support the existing neighborhood school model as outlined by the Town of Brookline:

1. The existing eight elementary schools will be at their capacity (Appendix 9). The models assume a completed Devotion School project.
2. The models also assume that the modulars at Baker and off-site rentals of private space for K-8 classrooms will be eliminated. The models do not assume any additional building capacity other than the ninth school (550 children).
3. In the models, 89% of the FY2021 enrollment is modeled with a specific Brookline address based on current GIS data of current BEEP and K-8 students. This includes assumptions about growth of enrollment from new developments permitted or in the process of permitting.

SITE SELECTION CRITERIA

Location/Access

- Minimizes walking distance
- Good access for vehicles
- Good access for walking/biking
- Good access to public transportation
- Central to student density and projected growth patterns (guided by initial ninth school target areas shown on page 26).

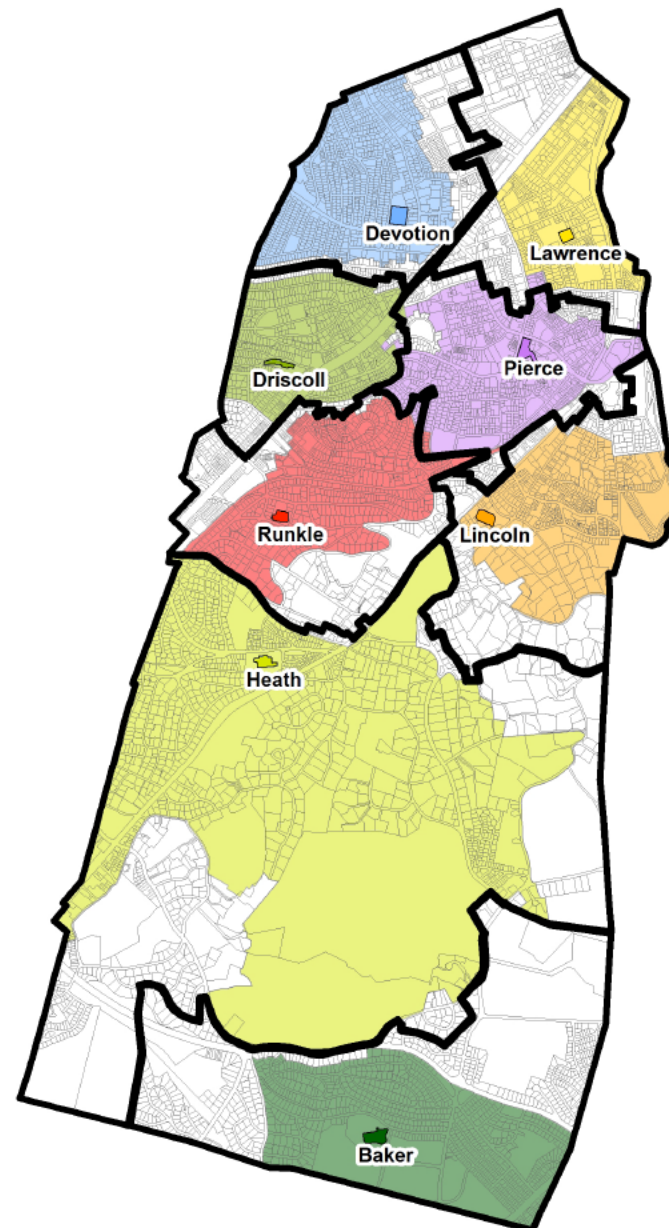
Physical Characteristics

- Suitable size for a 3.5 acre, 2.5 acre or urban/compact site
- Topography suitable for school and recreational fields (significant slopes and grade changes could make site development challenging)
- No severe environmental issues (e.g., floodplain)

Legal/Regulatory

- Public/Private land (Appendix 4)
- Land well documented as being used as open space was assumed to require replacement open space
- No deed restrictions prohibiting school or active use
- Historic preservation bylaws and guidelines allow for possible school development

2014-15 Student-School Assignment Areas



This map shows the approximate boundaries of actual school enrollment for the 2014-2015 academic year. The colored areas of the map show school assignment areas and the white portions of the map are school assignment buffer areas (see key below).

Approximate boundaries of actual school enrollment

School Assignment Areas:

- Devotion
- Lawrence
- Pierce
- Driscoll
- Lincoln
- Runkle
- Heath
- Baker
- Buffer Areas

The models include estimated enrollment numbers for the Hancock Village project.⁴

4. The remaining 11% includes 200 Metco students, and 2% “materials fee” students. The other children that are modeled without specific Brookline addresses represent growth in enrollment in as yet unknown locations in Town. For purposes of modeling potential districting scenarios, these 11% of students are distributed to each school district.
5. All students within modeled addresses within 1/4 mile radius of a school site were assigned to that school.⁵
6. Schools were then assigned the closest students to them proportionally, up to capacity (leaving room for out-of-district children.)
7. In some cases, assignments of modeled students were balanced in order to take into account significant geographical features impacting walkability, as well as

4 See estimates from Planning Department (Appendix 8). For purposes of this study, these estimates only affect the modeled location of future growth. The overall growth numbers are estimated from School projections as explained previously in Section 2.

5 This assumption simplifies the reality that many students walk more than 1/4 mile radius currently, and others attend particular schools for academic or buffering reasons rather than being assigned the school physically closest to them. For purposes of modeling future school assignments, A 1/4 mile radius was chosen as the minimum walking distance. This is a common standard in the planning industry, although in recent years the minimum walking distance has increased to 1/3 or even 1/2 mile for acceptable walking distances, depending on the quality of the pedestrian experience, the type of population doing the walking, cultural standards, etc.; 1/4 mile also happens to be half the distance between most of the existing elementary schools. Therefore, using a 1/4 mile radius for capturing a minimum “walkable” population was chosen by Planning Staff for purposes of analyzing future school assignment models.

to approximate the current distribution of out-of-district students and students eligible for reduced/free lunch.

It is important to understand that these scenarios are a model. Any decisions about districting assignment policy would need to go through Brookline’s normal public process, concluding with a vote by the BSC. The study team began site selection using information from the Town of Brookline. Working with School and GIS staff, the Planning Department identified a broad area of east Brookline as the initial overall school site target area that would lessen the likelihood of students traveling past one school to arrive at their assigned school. This target map is shown in Part 2 of this report.

It is important to note that the construction of a 9th elementary school with neighborhood-based student assignments will cause redistricting no matter where the location of the school. However, it is the intent of this study to preserve the potential for walkable, neighborhood-based schools wherever possible; 48% of modeled K-8 students live within 1/4 mile of a school today. All but one of the modeled scenarios described in Part 2 meet or exceed this percentage.

Building/Site Types

The scope of this study was to investigate sites suitable for a traditional elementary school of 550 students in 100,000 SF of space with parking for staff and visitors and adjacent playground and recreational space (Appendix 1). Currently, school parking accommodations vary widely. There are approximately 100 staff at each K-8 school in Brookline. The Runkle and Lawrence

Schools have no off-street parking as recent renovations took that parking for expansion space. Devotion and Pierce have parking garages but neither accommodates the full parking need in those schools in that these schools do not provide one parking space per full time staff person. The remaining schools all have some parking, although all also utilize residential streets for additional employee parking. The PSB is currently assessing parking needs and the use of on-street permits for staff at the request of the Transportation Board. The Town is seeking to reduce parking allocations through the use of strong transportation demand management (TDM) policies including incentives to use public transit. TDM is the application of strategies that reduce the use of single-occupancy vehicles and also spread travel demand over varied times of the day to reduce congestion and redistribute/reduce parking demand. For the purposes of this study, the PSB recommended parking for 60 cars (approximately 60% of the school parking need) be accommodated on site in all site options to allow comparison across alternatives, even though some sites are more accessible by public transit than others.

It is also the desire to optimize the location for another school in relation to the existing eight elementary schools so that

- “walking distances can be minimized, and that there be maximum accessibility and safety in relation to major street crossings, with good traffic circulation, and safe walking and bike riding conditions, and that the school be well-situated in relation to compatible and incompatible uses.”⁶

6 Town of Brookline Invitation to Bid/Request for

Comparison of 3.5 acre target site with sample existing schools and Brookline Map

The initial program for a ninth elementary school required a minimum target site size of 3.5 acres for a stand-alone site (within a broader site size range of three to six acres). The target site size could be reduced to 2.5 acres for a site adjacent to an existing town playground or recreational area. Initial requirements specified a building footprint of 50,000 to 70,000 SF, assuming a 1-1/2 or 2 story school building for a 100,000 SF school.

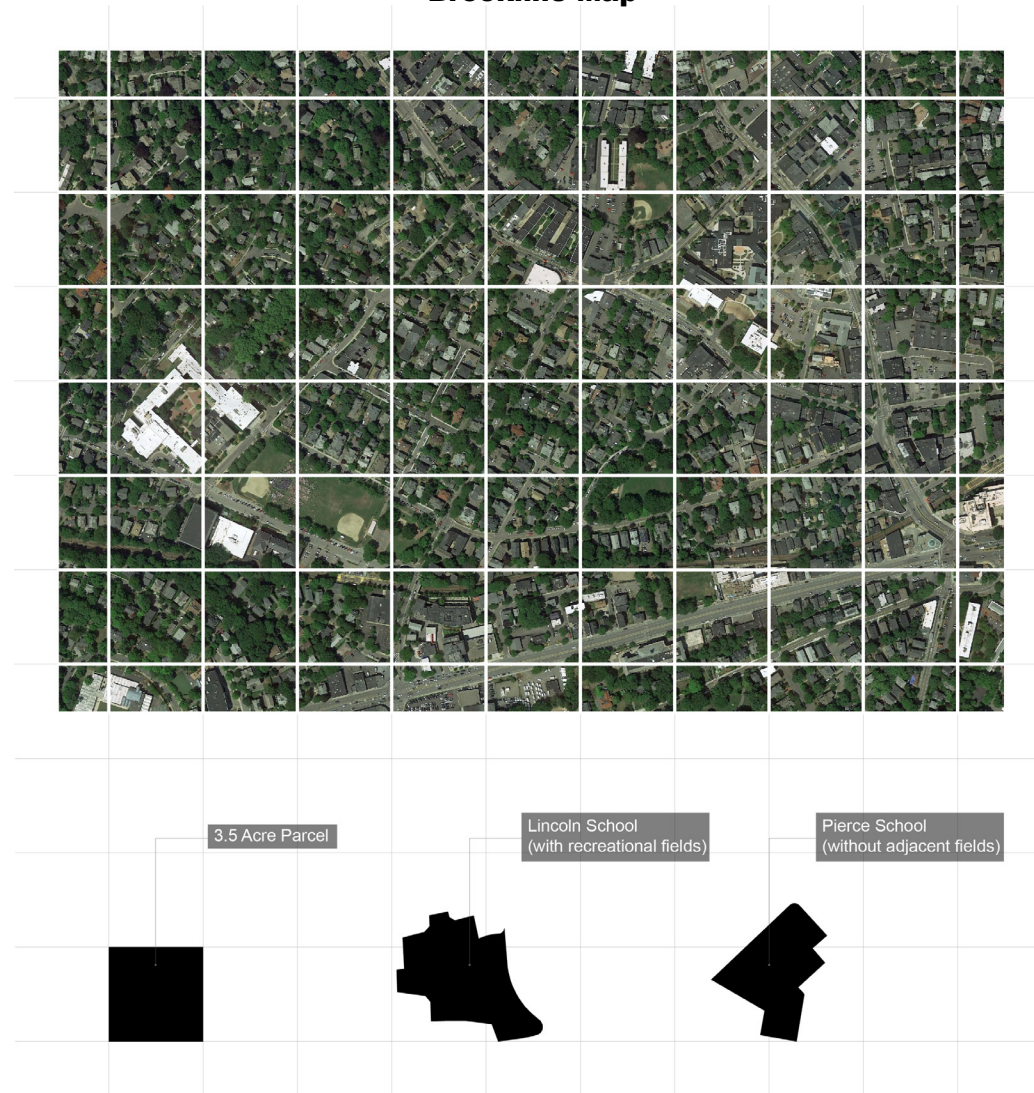
The challenges of identifying sites that meet these criteria are evident in a town of the density and mostly urban character of Brookline. To ensure that all options for a ninth elementary school were explored, the CivicMoxie team considered additional building and site characteristics for a ninth school in order to create a wider range of options for Town consideration. School project research and investigations of successful school programs led the team to identify three possible K-8 elementary school typologies:

Traditional

This scenario provides for a 3.5 acre site with a 1-1/2 to 2 story school building and adjacent playgrounds and recreational fields. Parking for 60 cars on site to accommodate 60% of teachers and staff with some visitor parking.

Traditional with Playgrounds and Recreation Space Adjacent

As outlined by the Town program, this scenario accommodates a traditional school



The illustration shows a 3.5 acre grid, representing the target K-8 elementary school site size, across a satellite map of a portion of Brookline, and also shows the footprint of two existing schools to scale on the map.

of 1-1/2 to 2 stories. The site can be smaller – 2.5 acres – if the school can access nearby or adjacent existing play and recreational space. These sites would be located near existing town parks and fields but would also probably have small playgrounds for K-2 onsite so that the younger children would not have to cross streets and walk off site.

Compact Site

Compact site schools take many shapes and are located in a variety of building types on a diverse scale of sites. The team's case study research revealed possibilities for a more compact school with rooftop playgrounds, limited or no ground level open space, and possible multiple uses on the same site or in the same building. The CivicMoxie team understands that the MSBA does not fund new schools that share uses within the same defined project. However, there are still opportunities for shared uses (separate buildings or ownership) on the same site. This school typology has no standard site size but opens up a range of possibilities for location and parcel size.

All of the above school typologies were considered during the site identification and evaluation process during this study. There are advantages and disadvantages of a compact typology vs. a traditional school typology:

Advantages:

- Regardless of whether the school is a traditional curriculum or a concept/theme-based school, a compact site school typology could offer interesting design choices that would work well in Brookline, particularly in denser areas (refer to case studies in Appendix 10);

- A compact site typology allows for more choice of feasible locations for a ninth school because the building can fit on a smaller parcel of land.

Disadvantages:

- Playground and play space still must be programmed similar to traditional typologies. However, the “free-range” type of play (e.g., fields) may be more limited or work best if the school is located within walking distance of an existing recreational field.

The work herein assumes the compact site school model is a possibility for a ninth elementary school and case studies were examined by the team (Appendix 10). This model also creates flexibility because these massing types tend to be more suitable to flexibility and change over time. Locations in town with denser populations are typically more desirable for mixed-use or commercial uses and depending on the location, compact site school buildings may be adapted more easily over time if school enrollment trends change and the need for school space is reduced. Note that such locations tend to be more flexible regarding alternative uses and adaptability for other purposes in the long term when they benefit from better public transportation access.

These schools sometimes offer opportunities for collaboration with a non-school entity and/or involve a private development partner to manage the development and financing of any mixed-use portion of the project.

School Curriculum/School Type

The core of this study is focused on identifying a traditional school site for a 9th

elementary school in Brookline. Because of the limited site options available, the team considered sites suitable for a concept/theme-based school as well. A concept/theme-based school is one that could provide specialized courses or curriculum and draw students from across the district. Examples could include a Science, Technology, Engineering, & Math (STEM) curriculum, or one also including Art (STEAM). Some communities offer music and arts as concept/theme-based schools and a foreign language immersion program could be another option. A school offering different classroom experiences to accommodate learning differences would also fit into this model. The CivicMoxie team wishes to emphasize that the question of a concept/theme-based school is separate from the question of the “best” location for a ninth school unless the BSC is willing to commit to pulling children from across town for the foreseeable future, whether or not there is enough volunteer interest for a concept/theme-based school.

New and innovative school design in denser locations accommodates a range of school types from traditional curriculum to charter schools to concept/theme-based schools (Appendix 10). There are advantages and disadvantages to a concept/theme-based school vs. a neighborhood-attended school:

Advantages:

- May offer an interesting and/or cutting-edge educational model that works better for some students;
- Could spur interesting public-private partnerships with companies or non-profits;

Alternative Models - Compact Site and Concept/Theme-based Schools

While the traditional school model is familiar to Brookline residents, the smaller site typology can be seen, in modified form, at Lincoln School where recreational fields are on-site but cannot accommodate soccer or baseball fields. In contrast, the compact site school typology as a traditional or concept/theme-based school would be a new idea for the town. Here are two examples of successful compact site schools that offer traditional curriculum or concept/theme-based school programs.

Baltimore Design School

Location: Baltimore, MD
 Year completed: 2013
 Architect: Ziger/Snead
 Grades served: 6-12
 Students: 600-700 (by 2016)
 Building size: 115,000 sqft



Housed in what was an abandoned factory the school demonstrates the power of design through exposed systems and best practices for historic renovation and adaptive reuse. The renovated building creates a collaborative and progressive educational environment, with art galleries, studios, classrooms, media center, fabrication facilities and computer labs.

PAVE Academy Charter School

Location: Brooklyn, NY
 Architect: Mitchell Giurgola
 Students: 365
 Building size: 40,000 sqft



This K-6 school is significant because it demonstrates the importances of creating a community friendly school that supports significant parent involvement – essential to student success – and the needs of a particularly high-needs population living in poverty. Children arrive early for a quiet breakfast and stay well into the afternoon with learning and play to fill a void many face at home.

Shared spaces, mixed uses, and unconventional recreational/playground space are the hallmarks of some innovative schools. These features allow urban schools on denser sites to offer different kinds benefits for the school children within their walls.

- Allows for more feasible locations of a ninth school since it ideally pulls kids from across town & doesn't affect redistricting;
- Allows for the use of smaller sites as the school design may be different from the traditional K-8 model in the town;
- Whether or not a ninth school is built, it would (if enough volunteer students attend) not affect current districting.

Disadvantages:

- If there isn't enough volunteer interest to attend the school, children will be pulled from across town to attend as their "neighborhood" school;
- Regardless of school type chosen, any site selected must also work as a redistricted traditional K-8.

As a separate question from the selection of a ninth school site, the selection of school type and curriculum would need to consider the degree to which such a model could meet the quality standards and Strategic Plan goals of the PSB, draw enough students to address enrollment increases, and be operationally and financially sustainable.

While it is not the purpose of this study to explore or evaluate the appropriateness of one school curriculum type over another, the team sought to ensure that the process of site identification and the selection of the finalist sites were both inclusive of the possibility that the ninth school be best suited as a concept/theme-based school. More on the site selection criteria for a concept/theme-based school is provided in the next section.

4. SITE SELECTION CRITERIA

The study team initially identified potential school sites by scouring the town by reviewing Town GIS maps, online maps and satellite images, conducting walking and driving tours, reviewing broker listings, and conducting informal conversations to gather information about property owner plans.

Possible sites for a ninth elementary school were identified using general criteria that was provided by the Town and that was refined by the team during the early stages of the study.

Basic Criteria

The site selection criteria are grouped into three categories:

- **Location/Access**
- **Physical characteristics**
- **Legal/Regulatory**

Location/Access

- Minimizes walking distance
- Good access for vehicles
- Good access for walking/biking
- Good access to public transportation
- Central to student density and projected growth patterns

Physical Characteristics

- Suitable size for a 3.5 acre, 2.5 acre or urban site
- Topography suitable for school and recreational fields
- No severe environmental issues (e.g., floodplain)

Legal/Regulatory

- Public/Private land (Appendix 4)

- Land well-documented as being used as open space was assumed to require replacement open space elsewhere to maintain the town's existing open space assets
- No deed restrictions prohibiting school or active use
- Historic preservation bylaws and guidelines allow for possible school development

In addition to these criteria, the team also considered other factors in the selection criteria:

- Is the site appropriate for a shared or adjacent non-school use?
- Are there existing needs or potential partners that might influence the use and development of a site to serve joint interests?
- Are there existing buildings on the site that can be reused for educational purposes?
- Is the site appropriate for an existing elementary school expand-in-place option or Brookline High School expansion?
- Will existing residential or commercial occupants need to be relocated if the Town negotiates a purchase of the property or acquires the property by using eminent domain powers?
- What are the level of historic preservation restrictions (local historic district vs national district vs historically significant building)?
- What would be the lost opportunity cost (financial and otherwise) if the site were developed as a school site in lieu of other potential uses?

Site Criteria for a Concept/Theme-based School

The Town developed the original site selection criteria for this study assuming a traditional elementary school as the ninth school. The possibility that a new elementary school in Brookline could be an alternative school model of a concept/theme-based school led the CivicMoxie team to re-evaluate the selection criteria to understand if any changes were necessary to add overall sites to review or in the selection of finalist sites. A concept/theme-based school is one that could provide specialized courses or curriculum and draw students from across the district. The team concluded that while there should be a reprioritizing of criteria to reflect the needs of a concept/theme-based school, those changes did not affect the overall list of sites or finalists. The criteria that would change for this type of school are the following:

- **Location/Access:** a concept/theme-based school would best be sited in a central location for the entire town. Easy access for all students is a goal.
- **Physical characteristics:** because of its different nature, a concept/theme-based school can have different physical characteristics than a traditional elementary school. The concept/theme-based school is a choice for parents and their children, and as such, there is less need to faithfully model existing schools in the district. This includes the need to provide traditional siting of playground and playing field space.
- **Size:** a concept/theme-based school is well-suited for a variety of site sizes, including a smaller, urban site, or a 2.5 or 3 acre site.

It is important to note that in addition to actual cost, the path to the construction of a new school includes other factors such as the complexity of programmatic elements and ownership, possible mixed uses on site, and the need or desire for development partners. Estimated costs must be balanced with these other factors affecting development, as well as likely redistricting for the scheme, and acquisition strategies. Particulars regarding development factors for each of the finalist sites are detailed in Part 2 of this study. In addition, issues of historic preservation and open space designation were considered as part of the site evaluation process.

Historic Preservation and Open Space

The general criteria for a school site includes considerations regarding the historic nature of neighborhoods, sites and buildings, as well as characteristics of town open space. In the case of historic character, the Town of Brookline Preservation Commission reviews all plans for demolition throughout Town, any plans within a Local Historic District (LHD), and any Town-owned or State-funding plans within a National or State Historic Register District to assess the appropriateness of intent and design in relation with historic preservation goals of the Town.

Town parks and the use and reuse of open space are overseen by the Division of Parks and Open Space which undertakes the acquisition, planning, design and maintenance of parks and recreation space in Brookline.

The evaluation of sites for consideration for a ninth elementary school included analysis of historic and open space protections which are explained in more detail here.

Historic Preservation⁷

Prior to the demolition of any building or structure anywhere in the Town of Brookline, Preservation staff, with the Chair, will first make a determination as to whether the structure is historically or architecturally significant. In making this decision, Preservation considers its location, design, setting, materials, workmanship, association to historically significant people or events, and feeling that the structure conveys (for example, its representation of a specific period of time). Unless a structure is clearly not significant, this decision will be referred to the Preservation Commission. Demolition of significant structures may be delayed by 12-18 months. Historically significant structures on properties that are in, or eligible to be in, the National/State Register of Historic Places (NR/SR) are delayed for 18 months; otherwise the delay period is 12 months.

Structures subject to demolition review include total or partial demolition of structures. For the most part, demolition includes removing 25% or more of the square footage of the building's sides and roof, removing one side of a building, removing the roof, or significantly altering the shape of the roof.

In almost all cases, the Preservation Commission will not approve the demolition of any structure within an LHD. Outside of LHDs, the Preservation Commission often works with the applicant to "lift" the stay of

⁷ This section is provided by the Town of Brookline Historic Preservation staff from an 8/12/15 memo (Appendix 2).

demolition earlier in exchange for changes to the proposed project that incorporate preservation concerns.

Local Historic District vs. National/State Historic Register Property

A common misconception is that properties in the National /State Historic Register are “more restricted” than those in an LHD. As noted above, demolition delay of significant NR/SR structures is longer than properties not on the NR/SR, but structures within an LHD are likely never to be demolished. The Preservation Commission reviews projects within LHDs which are viewable from public ways; all of the potential elementary school sites within LHDs are viewable from public ways. A new building within a LHD is reviewed so that it is in keeping with the character of the existing streetscape. For instance, a school building will need to be designed so that the façade is broken down to similar proportions as its surrounding buildings. Additionally, the window pattern and relationship to the street would need to be in harmony with the neighborhood generally. Finally, materials such as windows would be regulated; true divided light windows using wood rather than vinyl or metal would be required. Artificial siding would not be allowed, and the roof pitch and materials would need to be similar to those in the rest of the neighborhood. Additionally, any proposed structure or hardscape that changes the grading of the property is reviewed to be sympathetic and harmonious with the rest of the LHD. For example, if a particular LHD’s character includes puddingstone retaining walls and rod iron fencing, any new retaining walls and fencing would need to be of similar materials.

In practice, LHD properties usually have more preservation protection than other properties.

Any project on the NR/SR that also includes state or federal permitting, licensing, or funding is subject to review from the Massachusetts Historic Commission or the relevant funding agency. The Massachusetts Historic Commission will seek technical information and analysis from the Town Preservation staff. In the case of a school funding project that is only in a NR/SR but not in a LHD, the preservation recommendations would be tied into the state funding process, but would more likely change a project design than prohibit it.

Open Space

Some sites that were identified in the early stages of the study are open space parcels that fall under Article 97.

“Land is considered protected if it falls under Article 97 or if it is protected by a conservation restriction or owned by a conservation land trust. The Article 97 Amendment is a provision of the Massachusetts Constitution, added in 1972, which prevents the taking of public park, recreation, and conservation lands for other purposes without a majority vote of the Conservation Commission or Park and Recreation Commission, Board of Selectmen, Town Meeting, and a two-thirds vote of both houses of the State legislature.”⁸

The approvals necessary as well as the challenge of identifying replacement space were considered as the team made decisions

regarding finalists from the first phase site list. Additionally, several sites have deed restrictions with regard to use, in some cases excluding consideration of parcels even for active or passive play areas.

⁸ Town of Brookline Open Space Plan, 2010.

TOWN OF BROOKLINE, MASSACHUSETTS

OPEN SPACE MAP

Legend

PROTECTED OPEN SPACE AND OTHER OPEN LAND

- BROOKLINE LAND TRUST
- CEMETERIES
- COMMUNITY PARKS
- CONSERVATION AREAS
- CONSERVATION RESTRICTIONS
- GOLF COURSE
- NATIONAL HISTORIC SITES
- NEIGHBORHOOD PARKS & PLAYGROUNDS
- PASSIVE PARKS
- SCHOOL PLAYGROUNDS
- TRAFFIC ISLANDS & OTHER SMALL OPEN SPACES

OTHER UNPROTECTED OPEN LAND

- AGRICULTURAL AND RECREATION LAND
- CEMETERIES
- NEIGHBORHOOD PARKS & PLAYGROUNDS
- PRIVATE INSTITUTIONS
- SCHOOL PLAYGROUNDS
- STATE PROPERTIES
- TRAFFIC ISLANDS & OTHER SMALL OPEN SPACES
- WATER BODY

- STREAMS AND RIVERS
- STREET EDGES
- TOWN BOUNDARY

DATA SOURCES

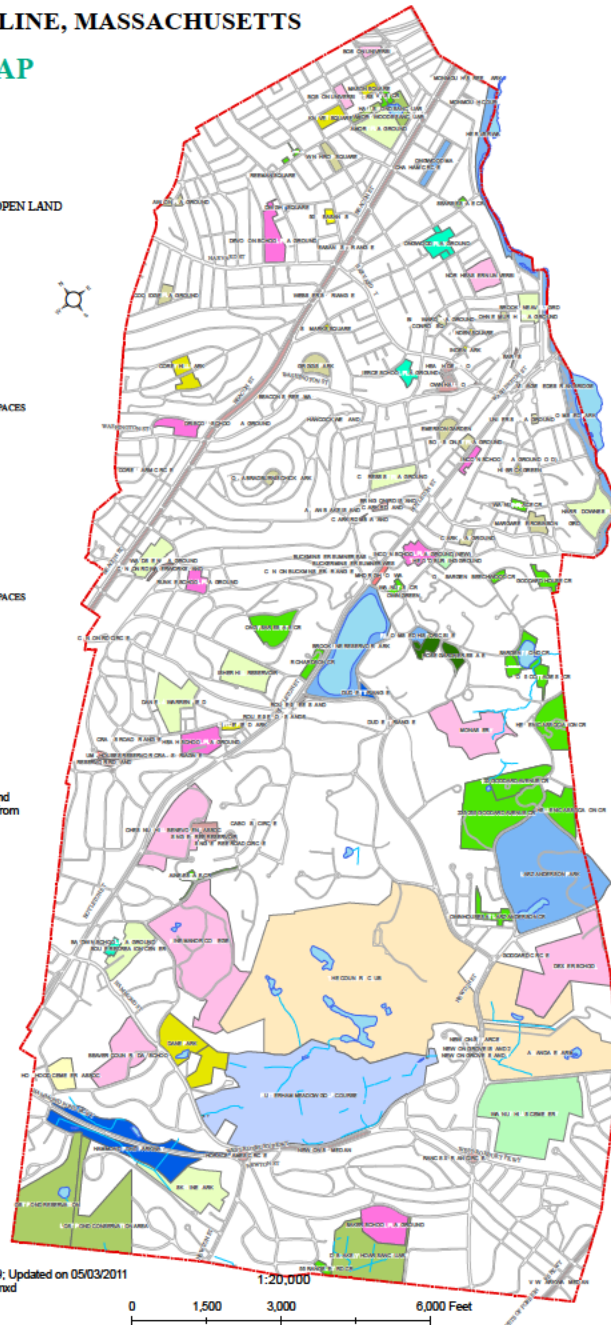
Street edge, town boundary, water bodies, and open space layers were created by and are from the Brookline GIS Database.

Disclaimer

The information shown on this map is from the Brookline Geographic Information System (GIS) Database. The Town of Brookline makes no claims, no representations, and no warranties, express or implied, concerning the validity (express or implied), the reliability or the accuracy of the GIS data and GIS data products furnished by the Town, including the implied validity of any uses of such data.



Map created by Brookline GIS on 06/03/2009; Updated on 05/03/2011
map doc: Standardmaps/OpenSpace11x17.mxd



5. OVERVIEW OF APPROACH

The information that has been provided in this section of the report seeks to inform the public of the process and methodology for selecting sites for consideration, as well as provide a range of costs, without revealing information prematurely regarding possible sites.

Site Plans

Each potential finalist site was explored to determine suitability by laying out a school, access ways, parking and recreational space on the parcels. Determinations were made regarding the parcels or partial parcels needed for adequate site assembly to provide for a school site. Zoning regulations were followed where possible and exceptions are noted. Parking for 60 cars (60% of the approximately 100 on-site staff) is provided in each scenario to allow comparisons across sites.

Preliminary Cost and Potential Development Structure

The preliminary cost and potential development structure for each site has been provided in Part 2 of this report. Each development site has unique characteristics. This information is provided to offer some clarity on the costs, potential development structures, the negotiations, and the possible partners involved in each potential project site, so that the Town can evaluate the necessary path to move forward and assess the level of complexity and involvement needed.

While each potential project is different, we have tried to provide a means of comparing the options, including how the

likely development might be structured with partners relative to non-school uses on each site. Displacement and opportunity costs are also factored in where appropriate (e.g., displacing current municipal or non-municipal operations, taking municipal swing space off line, displacing potential commercial property tax sources or inhibiting tax growth, etc.) The resulting development cost estimates for the six finalist sites, explained in detail in Part 2 of this report, indicate a range of net school development costs from [REDACTED]. As of the writing of this report, there is not any line item planned for in the Town's Capital Improvement Plan. Given the magnitude of the estimated cost, this additional capital project would require majority approval at Town Meeting as part of the normal budget process, and would most likely also require a Debt Exclusion and Operating Tax Override via Brookline voters.

Site Acquisition

This School Site Identification Study has explored both Town-owned land and privately-owned parcels in an attempt to find the sites that best meet the criteria set forth in this report. Public educational facilities fall under the category of "public use" and sites for these facilities that contain private property may be obtained through the eminent domain powers available to government authorities, including the Town of Brookline (which would require authorization by 2/3 vote of Town Meeting). If the Board of Selectmen and School Committee decide to proceed with steps to build a ninth elementary school, and if the priority site is privately-owned or contains a privately-owned parcel, it is the team's recommendation to hire a strategy consultant to further explore first negotiating with

the private owner to acquire the property (property acquisition would still require majority vote by Town Meeting). However, if good faith negotiations fail, the Town (if authorized by Town Meeting) would be able to use eminent domain powers to acquire the property. This does not mean that the Town will "take" the property with no fair market value compensation. Rather, eminent domain allows public use projects to move forward without a private owner "holdout" blocking progress (Appendix 3).

6. NEXT STEPS FOR THE TOWN

Timing is critical for the decision-making and planning process related to a ninth elementary school in Brookline. Because of the lead time necessary for MSBA applications, the BOS and BSC must make a decision regarding a ninth elementary school in the fall of 2015 and be ready to prepare for moving ahead no matter what the strategy. If the choice is to move ahead with a ninth school, an application to the MSBA must be made in spring of 2016 to be on track to meet enrollment growth projections. If the BOS and BSC decide on another strategy to solve the enrollment challenge, timing is still critical as budgeting and policy decisions will need to be made quickly.